

CLAIMS LISTING

The present state of the claims pending herein, including the amendment to claim 8, the cancellation of claims 4 and 7, and the addition of newly presented claims 16-21, is as set forth below. The listing of the pending claims supercedes any previous listings. No new matter has been added.

1. (Cancelled)

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Cancelled)

6. (Cancelled)

7. (Cancelled)

8. (Currently Amended) The magnetic resonance method as set forth in claim 16, a first partial image is reconstructed from the image data acquired in the step of acquiring high-density image data of the first acquisition type and a second partial image is reconstructed from the image data acquired in of the step of acquiring low-density image data, and ~~according to claim 4,~~ characterized in that the determinant of ~~at~~the set of equations for every pixel of the resulting reconstructed image ~~is will be~~ computed and the reconstructed image of the pixel is ~~will be~~ selected from data of the second region if the determinant exceeds a first predetermined threshold value; and is selected from the

data of the first region if the determinant exceeds is exceeding a second predetermine threshold value, and is otherwise be selected from the data of the first region, wherein the first and second predetermined threshold values may be equivalent.

9. (Cancelled)

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (New) A magnetic resonance method for fast dynamic imaging of a plurality of signals acquired by an array of multiple sensors of an object being imaged, comprising the steps of:

generating a sensitivity map of each of the sensors, which step includes weighting at least two adjacent sensor's recording signals originating from the same imaging position with a sensitivity factor of each respective sensor at each respective imaging position and calculating an image intensity from the signals measured by the different sensors;

acquiring high-density image data in a first region of k-space using a traditional imaging method to generate a set of high-density image data within said first region;

acquiring low-density image data in a second region of k-space using a sensitivity encoding method to generate a set of low-density image data within said second region, which sensitivity encoding method includes the use of the sensitivity map; and

reconstructing a full image of the object using the high-density and low-density image data;

wherein a number of phase encoding steps required for carrying out said method is reduced with respect to a full set of image data acquired in the steps of acquiring, and wherein the step of generating may be carried out either before or after the step of acquiring the high-density image data.

17. (New) The magnetic resonance method according to claim 16, further including a step of acquiring medium-density image data, which medium-density image data are acquired in a third region of k-space located between the first region and the second region, and said third region includes two sub-regions where the first sub-region is acquired using a traditional imaging method and the second sub-region is acquired using a sensitivity map.

18. (New) The magnetic resonance method according to claim 16, wherein the step of acquiring the high-intensity image data occurs before the step of acquiring the low-density image data, the step of acquiring the low-density data is limited only to the second region.

19. (New) The magnetic resonance method according to claim 16,
wherein the image data acquired in the step of acquiring the low
density image data for fast dynamic imaging is acquired
simultaneously from spatial harmonics on several adjacent
trajectories in k-space, which data is reconstructed to a partial
image of the object.

20. (New) The magnetic resonance method according to claim 16,
wherein the first region and the second region overlap to a
predetermined extent.

21. (New) The magnetic resonance method according to claim 16,
wherein the image data of the first region are filtered by
multiplying with a Riesz function and then fast-Fourier
transformed.